```
1 using
  5
  6 namespace NeuralLibrary
  8
        public class Network
  9
 10
            #region Constructors
11
12
            public Network(bool RPROP = false, params int[] layers)
16
17
                : this(layers, GenerateSigmoids(layers), RPROP)
 20
 21
 26
            public Network(int[] layers, Sigmoid[] activations, bool RPROP = false)
 88
            #endregion Constructors
 89
 90
91
 99
            public double Train(double[] input, double[] desired, double learningRate, double momentum)
108
109
191
            #region Network Functions
192
193
196
            public void NudgeWeights()
202
203
            public void FeedForward(double[] inputs)
207
242
243
            public void BackPropagate(double[] desired)
247
277
278
            public void UpdateWeights(double learningRate, double momentum)
281
288
289
            private static Sigmoid[] GenerateSigmoids(int[] layers)
294
307
308
            #endregion Network Functions
309
310
326
327
400
401 }
```